

Docket No. AUS9-2000-0633-US1

CLAIMS:

What is claimed is:

1. A method in a network computing system for managing a plurality of subnet managers in the network computing system, the method comprising:

receiving an identification of a set of subnet managers within the plurality of subnet managers;

allowing the set of subnet managers to participate in a master election to select a master subnet manager;

placing subnet managers other than the set of subnet managers in a dormant state; and

electing the master subnet manager from the set of subnet managers through the master election, wherein other subnet managers within the number of subnet managers poll the master subnet manager to allow the other subnet managers to elect a new master subnet manager if the master subnet manager fails.

2. The method of claim 1, wherein the other subnet managers are in a number such that polling of the subnet manager occurs without causing the master subnet manager to fail.

3. The method of claim 1, wherein polling response times for the set of subnet managers are identified and used in the master subnet election.

4. The method of claim 1, wherein each of the number of subnet managers participate in the master election using

Docket No. AUS9-2000-0633-US1

a state machine.

5. The method of claim 1, wherein the identification is received from a user.

6. The method of claim 1, wherein the network computing system is a system area network.

7. A method for initializing a subnet manager in a network computing system, the method comprising:

determining whether the subnet manager is enabled;

determining an expected polling response time for the subnet manager;

responsive to the subnet manager being enabled, polling other subnet managers for priority and status information;

determining whether the subnet manager is to become a master subnet manager using priority information returned from other subnet managers; and

responsive to another subnet manager in the network computing system having a higher priority than the subnet manager in the priority information, placing the subnet manager in a standby mode.

8. The method of claim 7, wherein the process is a subnet manager selection state machine.

9. A network computing system comprising:

a plurality of devices within a subnet linked together within the subnet via switches; and

a plurality of subnet managers connected to the

Docket No. AUS9-2000-0633-US1

subnet, wherein a number of the subnet managers are enabled to participate in an election process to elect a master subnet manager and wherein subnet managers other than the number of subnet managers are in a standby mode such that the master subnet manager is polled by a remaining number of subnet managers within the number of subnet managers without overwhelming the master subnet manager with polling requests.

10. A network computing system for managing a plurality of subnet managers in the network computing system comprising:

receiving means for receiving an identification of a set of subnet managers within the plurality of subnet managers;

allowing means for allowing the set of subnet managers to participate in a master election;

placing means for placing subnet managers other than the set of subnet managers in a dormant state; and

electing means for electing a master subnet manager from the set of subnet managers through the master election, wherein other subnet managers within the number of subnet managers poll the master subnet manager to ensure that the other subnet manager are able to take over in case the master subnet manager fails, wherein the other subnet managers are in a number such that polling of the subnet manager occurs without overwhelming the master subnet manager with polling requests.

11. The network computing system of claim 10, wherein the other subnet managers are in a number such that

Docket No. AUS9-2000-0633-US1

polling of the subnet manager occurs without causing the master subnet manager to fail.

12. The network computing system of claim 10, wherein polling response times for the set of subnet managers are identified and used in the master subnet election.

13. The network computing system of claim 10, wherein each of the number of subnet managers participate in the master election using a state machine.

14. The network computing system of claim 10, wherein the identification is received from a user.

15. The network computing system of claim 10, wherein the network computing system is a system area network.

16. A data processing system for initializing a subnet manager in a network computing system comprising:

first determining means for determining whether the subnet manager is enabled;

second determining means for determining an expected polling response time for the subnet manager;

polling means, responsive to the subnet manager being enabled, for polling other subnet managers for priority and status information;

third determining means for determining whether the subnet manager is to become a master subnet manager using priority information returned from other subnet managers; and

placing means, responsive to another subnet manager

Docket No. AUS9-2000-0633-US1

in the network computing system having a higher priority than the subnet manager in the priority information, for placing the subnet manager in a standby mode.

17. The data processing system of claim 16, wherein the process is a subnet manager selection state machine.

18. A computer program product in a computer readable medium for use in a network computing system for managing a plurality of subnet managers in the network computing system, the computer program product comprising:

first instructions for receiving an identification of a set of subnet managers within the plurality of subnet managers;

second instructions for allowing the set of subnet managers to participate in a master election;

third instructions for placing subnet managers other than the set of subnet managers in a dormant state; and

fourth instructions for electing a master subnet manager from the set of subnet managers through the master election, wherein other subnet managers within the number of subnet managers poll the master subnet manager to ensure that the other subnet manager are able to take over in case the master subnet manager fails, wherein the other subnet managers are in a number such that polling of the subnet manager occurs without overwhelming the master subnet manager with polling requests.

19. A computer program product in a computer readable medium for use for initializing a subnet manager in a network computing system, the computer program product

Docket No. AUS9-2000-0633-US1

comprising:

first instructions for determining whether the subnet manager is enabled;

second instructions for determining an expected polling response time for the subnet manager;

third instructions for responsive to the subnet manager being enabled, polling other subnet managers for priority and status information;

fourth instructions for determining whether the subnet manager is to become a master subnet manager using priority information returned from other subnet managers; and

fifth instructions for responsive to another subnet manager in the network computing system having a higher priority than the subnet manager in the priority information, placing the subnet manager in a standby mode.

20. A data processing system comprising:

a bus system;

a channel adapter unit connected to a system area network fabric;

a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to receive an identification of a set of subnet managers within the plurality of subnet managers; allow the set of subnet managers to participate in a master election to select a master subnet manager; place subnet managers other than the set of subnet

[illegible]